Annexure-1

PRICE VARIATION CLAUSE FOR COMPOSITE INSULATORS

The price quoted/confirmed is based on the cost of raw material and labour cost as on the date of quotation and the same is deemed to be related to the prices of raw material and all India average consumer price index number for industrial workers as specified in the price variation clause given below. In case of any variation in these index numbers, the price payable shall be subject to adjustment up or down in accordance with the following formula:

$$P = \frac{P_0}{100}\left[14 + 4\frac{Zn}{Zn_0} + 8\frac{Al}{Al_0} + 6\frac{I}{I_0} + 37\frac{R}{R_0} + 8\frac{F}{F_0} + 8\frac{FP}{FP_0} + 5\frac{FE}{FE_0} + 10\frac{W}{W_0}\right]$$

Wherein,

P = Price payable as adjusted in accordance with the above formula.

P_0 = Price quoted/confirmed.

Zn_0 = Price of electrolytic high grade zinc (refer notes).
This price is as applicable on the first working day of the month, **ONE** month prior to the date of tendering.

Al_0 = Price of EC Grade Aluminium rod (Properzi rods) (refer notes).
This price is as applicable on the first working day of the month, **ONE** month prior to the date of tendering.

I_0 = Wholesale Price Index number for Pig Iron (Base : 2004-05 = 100) (refer notes).
This index number is as applicable for the month, **THREE** months prior to the date of tendering.

R_0 = Wholesale Price Index number for Rubber (Polymers including synthetic rubber)(Base: 2004-05 = 100)
This index number is as applicable for the month, **THREE** months prior to the date of tendering.

F_0 = Wholesale Price Index number for Fibre Glass & Glass sheet (Base: 2004-05 = 100) (refer notes).
This index number is as applicable for the month, **THREE** months prior to the date of tendering.

FP_0 =Wholesale price index number for Fuel & Power (Base: 2004-05=100) (refer notes)
This index number is as applicable for the month, **THREE** months prior to the date of tendering.

FE_0 = IEEMA's Banker's selling rate of exchange between foreign currencies prevailing as on first working day
This exchange rate is as applicable **ONE** month prior to the date of tendering (refer notes)

W_0 = All India average consumer price index number for industrial workers, as published by the Labour Bureau, Ministry of Labour, Govt. of India (Base: 2001 = 100).
This index number is as applicable for the month **THREE** months prior to the date of tendering.

For example, if date of tendering falls in March 2013, the applicable Prices of electrolytic high grade zinc (Zn_0) and Prices of EC Grade Aluminium rods (Al_0) to be considered for the month of February 2013 whereas wholesale price index numbers for Pig Iron (I_0), Rubber(R_0), Fibre Glass & Glass Sheet (F_0), Fuel Power (FP_0) and all India average consumer price index number (W_0) to be considered for the month of December 2012 and IEEMA's Banker's selling rate of exchange between foreign currency (FE_0) to be considered for the month February 2013.

The above indices are as published by IEEMA vide IEEMA circular reference IEEMA(PVC)/COMP_INSU/_/_ prevailing as on first working day of the month _____ i.e., one month prior to the date of tendering.

Zn = Price of electrolytic high grade zinc (refer notes).
This price is as applicable on the first working day of the month, **ONE** month prior to the date of delivery.

Al = Price of EC Grade Aluminium rods (Properzi rods) (refer notes).
This price is as applicable on the first working day of the month, **ONE** month prior to the date of delivery.

I = Wholesale Price Index number for Pig Iron (Base : 2004-05 = 100) (refer notes).
This index number is as applicable for the month, **THREE** months prior to the date of delivery.

R = Wholesale Price Index number for Rubber (Polymers including synthetic rubber) (Base: 2004-05 = 100)
This index number is as applicable for the month, **THREE** months prior to the date of delivery.

F = Wholesale Price Index number for Fibre Glass & Glass sheet (Base: 2004-05 = 100) (refer notes).
This index number is as applicable for the month, **THREE** months prior to the date of delivery.

FP = Wholesale price index number for Fuel & Power (Base: 2004-05=100) (refer notes).
This index number is as applicable for the month, **THREE** months prior to the date of delivery.

FE = IEEMA's Banker's selling rate of exchange between foreign currency prevailing on the first working day
This exchange rate is as applicable **ONE** month prior to the date of delivery (refer notes)

W = All India average consumer price index number for industrial workers, as published by the Labour Bureau, Ministry of Labour, Govt. of India (Base: 2001 = 100).
This index number is as applicable for the month **THREE** months prior to the date of delivery.

For example, if the date of delivery in terms of clause given below falls in December 2013, the applicable Prices of electrolytic high grade zinc (Zn) and Prices of EC Grade Aluminium rods (Al) to be considered for the month of November 2013 whereas wholesale price index numbers for Pig Iron (I), Rubber(R), Fibre Glass & Glass Sheet (F), Fuel Power (FP) and all India average consumer price index number (W) to be considered for the month of September 2013 and IEEMA's Banker's selling rate of exchange between foreign currency (FE) to be considered for the month of November 2013..

The "date of delivery" is the date on which the Composite Insulator is notified as being ready for inspection/despatch (in the absence of such notification, the date of manufacturer's despatch note is to be considered as the date of delivery) or the contracted delivery date (including any agreed extension thereto), whichever is earlier.

Notes:

(a) All prices of raw materials are exclusive of modvatable excise duty and exclusive of any other central, state or local taxes, octroi etc.

(b) All prices are as on 1st working day of the month.

(c) The details of the prices considered are as under:

1. The price of Aluminium in Rs./MT is the average Ex-works price of EC Grade Aluminium rod quoted by the primary producers confirming to specifications IS: 5484:1978

2. The price of Electrolytic high grade zinc (in Rs/MT) is ex-works price quoted by a primary producer.

3. The wholesale price index numbers for 'Pig Iron', 'Rubber', 'Fiber Glass & Glass sheet' and 'Fuel & Power' are as published by the Office of Economic Advisor, Ministry of Industry, Govt. of India, New Delhi with base 2004-05 = 100.

4. The exchange rates in Indian Rs. would be for the following currencies only.
   1) US Dollars 2) pound Sterling 3) Japanese Yen 4) Euro

PRICE VARIATION CLAUSE FOR SWITCHGEAR AND CONTROLGEAR

The price quoted/confirmed is based on the cost of raw materials/components and labour cost as on the date of quotation and the same is deemed to be related to prices of raw materials / components and all India average consumer price index number for industrial workers as specified in the price variation clause given below. In case of any variation in these prices and Index number, the price payable shall be subject to adjustment up or down in accordance with the following formula:

$$P = \frac{P_0}{100}\left(25 + 17\,\frac{IS}{IS_0} + 18\,\frac{C}{C_0} + 10\,\frac{Al}{Al_0} + 13\,\frac{In}{In_0} + 17\,\frac{W}{W_0}\right)$$

Wherein,

P = Price payable as adjusted in accordance with above formula.

P_0 = Price quoted/confirmed.

IS_0 = Wholesale price index of 'Iron and Steel' (base: 1993-94 = 100) (refer notes).

This index is as applicable on the first week ending Saturday of the month, three months prior to the date of tendering.

C_0 = Price of electrolytic copper wire bars (refer notes).

This price is as applicable on the first working day of the month, one month prior to the date of tendering.

Al_0 = Price of busbar grade aluminium (refer notes).

This price is as applicable on the first working day of the month, one month prior to the date of tendering.

In_0 = Price of phenolic moulding powder for switchgear and controlgear of medium/lower voltage (upto 650 volts) or price of epoxy resin for HT switchgear (above 650 volts) (refer notes).

This price is as applicable on the first working day of the month, one month prior to the date of tendering.

W_0 = All India average consumer price index number for industrial workers, as published by the Labour Bureau, Ministry of Labour, Govt. of India (Base 1982 = 100).

This index number is as applicable for the month, four months prior to the date of tendering.

For example, if the date of tendering falls in May 2001, the applicable prices of electrolytic copper wire bars (C_0), busbar grade aluminium (Al_0) and insulating material (In_0) should be for the month of April 2001 and wholesale price index of 'Iron and Steel' (IS_0) should be for the first week ending Saturday of February 2001 and all India average consumer price index number (W_0) should be for the month of January 2001.

The above prices and indices are as published by IEEMA vide circular reference number IEEMA(PVC)SWGR/_/_ prevailing as on first working day of the month ..... i.e., one month prior to the date of tendering.

IS = Wholesale price index of 'Iron and Steel' (base: 1993-94 = 100) (refer notes).

This index is as applicable on the first week ending Saturday of the month, four months prior to the date of delivery.

C = Price of electrolytic copper wire bars (refer notes).

This price is as applicable on the first working day of the month, two months prior to the date of delivery.

Al = Price of busbar grade aluminium (refer notes).
This price is as applicable on the first working day of the month, two months prior to the date of delivery.

In = Price of phenolic moulding powder for switchgear and controlgear of medium/lower voltage (upto 650 volts) or price of epoxy resin for HT switchgear (above 650 volts) (refer notes). This price is as applicable on the first working day of the month, two months prior to the date of delivery.

W = All India average consumer price index number for industrial workers, as published by the Labour Bureau, Ministry of Labour, Govt. of India (Base 1982 = 100). This index number is as applicable for the month, five months prior to the date of delivery.

For example, if the date of delivery in terms of clause given below falls in December 2001 the applicable price of raw materials viz: C, Al and In should be for the month of October 2001 and wholesale price index of 'Iron and Steel' (IS) should be for the first week ending Saturday of August 2001 all India average consumer price index number (W) should be for the month of July 2001.

The "date of delivery" is the date on which the switchgear equipment is notified as being ready for inspection/despatch. (In the absence of such notification the date of manufacturer's despatch note is to be considered as the date of delivery) or the contracted delivery date (including any agreed extension thereto), whichever is earlier.

Notes: (a) All prices of raw materials are exclusive of modvatable excise/CV duty amount and exclusive of any other central, state or local taxes, octroi etc.

(b) All prices are as on first working day of the month.

(c) The details of prices are as under:

1) The wholesale price index number for 'Iron and Steel' is as published by the office of Economic Advisor, Ministry of Industry, Govt. of India, New Delhi, with base 1993-94 = 100. This wholesale price index is being published weekly on provisional basis. However, the same gets finalised after eight weeks and is normaly available after two months. Therefore, we are considering in our calculations this final index published by Economic Advisor for the first Saturday of the months two months prior to the date of which the prices of other raw materials such as C, Al and In are published for the corresponding month.

2) The price for electrolytic copper wire bars (in Rs/MT) is ex-godown price as quoted by the primary producer of copper.

3) The price of busbar grade aluminium (in Rs/MT) is the average of ex-works price as quoted by the two primary producers for the busbar size 152.4 x 6.35 mm flat approxi mately, of grade equivalent to E91E as per IS 5082-1981 (or the latest).

4) The price of insulating material (in Rs/Kg)

is the average price of phenolic moulding powder quoted by three manufacturers. (for switchgear and controlgear of medium/lower voltage upto 650 volts). **or**

is the price of epoxy resin quoted by a resin manufacturer for their grade CT 5900 or its nearest equivalent. (for HT switchgear above 650 volts).

PRICE VARIATION CLAUSE FOR HT SWITCHGEAR (ABOVE 36 KV)

The price quoted/confirmed is based on the cost of raw materials/components and labour cost as on the date of quotation and the same is deemed to be related to prices of raw materials / components and all India average consumer price index number for industrial workers as specified in the price variation clause given below. In case of any variation in these prices and Index number, the price payable shall be subject to adjustment up or down in accordance with the following formula:

The price variation clause is split up into two parts. Part-I is for indigenous content of the switchgear and Part-II is for the import content of the switchgear.

Part-I : Price variation clause for indigenous content of the switchgear (above 36 KV)

$$PV_1 = \frac{P_0}{100}\left(25 + 17\ \frac{IS}{IS_0} + 18\ \frac{C}{C_0} + 10\ \frac{Al}{Al_0} + 13\ \frac{In}{In_0} + 17\ \frac{W}{W_0}\right) - P_0$$

Wherein,

PV_1 = Variation in price in Indian rupees on account of variation in input costs of indigenous content, and labour costs payable in accordance with the above formula.

P_0 = Price quoted/confirmed Minus (–) I_0.

IS_0 = Wholesale price index of 'Iron and Steel' (base: 1993-94 = 100) (refer notes).

This index is as applicable on the first week ending Saturday of the month, three months prior to the date of tendering.

C_0 = Price of electrolytic copper wire bars (refer notes).

This price is as applicable on the first working day of the month, one month prior to the date of tendering.

Al_0 = Price of busbar grade aluminium (refer notes).

This price is as applicable on the first working day of the month, one month prior to the date of tendering.

In_0 = Price of epoxy resin (refer notes).

This price is as applicable on the first working day of the month, one month prior to the date of tendering.

W_0 = All India average consumer price index number for industrial workers, as published by the Labour Bureau, Ministry of Labour, Govt. of India (Base 1982 = 100).

This index number is as applicable for the month, four months prior to the date of tendering.

For example, if the date of tendering falls in May 2001, the applicable prices of electrolytic copper wire bars (C_0), busbar grade aluminium (Al_0) and insulating material (In_0) should be for the month of April 2001 and wholesale price index of 'Iron and Steel' (IS_0) should be for the first week ending Saturday of February 2001 and all India average consumer price index number (W_0) should be for the month of January 2001.

The above prices and indices are as published by IEEMA vide circular reference number IEEMA(PVC)SWGR/_/_ prevailing as on first working day of the month ..... i.e., one month prior to the date of tendering.

IS = Wholesale price index of 'Iron and Steel' (base: 1993-94 = 100) (refer notes).

This index is as applicable on the first week ending Saturday of the month, four months prior to the date of delivery.

C = Price of electrolytic copper wire bars (refer notes).

This price is as applicable on the first working day of the month, two months prior to the date of delivery.

Al = Price of busbar grade aluminium (refer notes).

This price is as applicable on the first working day of the month, two months prior to the date of delivery.

In = Price of epoxy resin (refer notes).

This price is as applicable on the first working day of the month, two months prior to the date of delivery.

W = All India average consumer price index number for industrial workers, as published by the Labour Bureau, Ministry of Labour, Govt. of India (Base 1982 = 100).

This index number is as applicable for the month, five months prior to the date of delivery.

For example, if the date of delivery in terms of clause given below falls in December 2001 the applicable price of raw materials viz: C, Al and In should be for the month of October 2001 and wholesale price index of 'Iron and Steel' (IS) should be for the first week ending Saturday of August 2001 all India average consumer price index number (W) should be for the month of July 2001.

The "date of delivery" is the date on which the switchgear equipment is notified as being ready for inspection/despatch. (In the absence of such notification the date of manufacturer's despatch note is to be considered as the date of delivery) or the contracted delivery date (including any agreed extension thereto), whichever is earlier.

Part II : Price variation for import content of switchgear (above 36kV)

$$PV_2 = \frac{100 \times I_0}{(100 + D_0)} \left(\frac{E_0}{E} - 1 \right) + \frac{I_0}{(100 + D_0)} \left(\frac{Ec_0}{Ec} \cdot D - D_0 \right)$$

Wherein:

PV_2 : Variation in price in Indian Rupees on account of variation in exchange rates and rate of import duties, payable in accordance with the above formula.

I_0 : Rupee component of quoted price related to Imports (CIF in Rs. + Import duties at the rate D_0, defined below considered at the time of quotation).

E_0 : IEEMA's Banker's selling rate of exchange between foreign currency and Indian Rupees expressed in concerned foreign currency equivalent to Rupees 100 prevailing on the first Bankers working day one month prior to the date of tendering (refer notes).

E : IEEMA's Banker's selling rate of exchange between foreign currency and Indian Rupees expressed in concerned foreign currency equivalent to Rupees 100 prevailing on the first Banker's working day four months prior to the date of delivery (refer notes).

D : Effective import duty rate in percentage (Excluding duties set off against MODVAT) as per Item no. 85.38 of customs tariff act in so far as it applies to the parts of customs tariff item 85.35 prevailing on 1st working day of the calendar month, two months prior to the date of delivery.

D_0 : Effective import duty rate in percentage (excluding duties set off against modvat) as per item No. 85.38 of customs tariff Act in so far as it applies to the parts of customs tariff item 85.35 prevailing on 1st working day of the calendar month, one month prior to the date of tendering.

EC : Rate of exchange between foreign currency and Indian Rupees expressed in foreign currency equivalent to Rs. 100/- adopted by Customs prevailing on first working day of the calendar month, two months prior to date of delivery (refer notes).

EC_0 : Rate of exchange between foreign currency and Indian Rupees expressed in foreign currency equivalent to Rs. 100/- adopted by Customs prevailing on first working day of the calendar month, one month prior to date of tendering (refer notes).

Notes: (a) All prices of raw materials are exclusive of modvatable excise/CV duty amount and exclusive of any other central, state or local taxes, octroi etc.

(b) All prices are as on first working day of the month.

(c) The details of prices are as under:

1) The wholesale price index number for 'Iron and Steel' is as published by the office of Economic Advisor, Ministry of Industry, Govt. of India, New Delhi, with base 1993-94 = 100. This wholesale price index is being published weekly on provisional basis. However, the same gets finalised after eight weeks and is normaly available after two months. Therefore, we are considering in our calculations this final index published by Economic Advisor for the first Saturday of the months two months prior to the date of which the prices of other raw materials such as C, Al and In are published for the corresponding month.

2) The price for electrolytic copper wire bars (in Rs/MT) is ex-godown price as quoted by the primary producer of copper.

3) The price of busbar grade aluminium (in Rs/MT) is the average of ex-works price as quoted by the two primary producers for the busbar size 152.4 x 6.35 mm flat approxi mately, of grade equivalent to E91E as per IS 5082-1981 (or the latest).

4) The price of insulating material (in Rs/Kg) is the price of epoxy resin quoted by a resin manufacturer for their grade CT 5900 or its nearest equivalent.

(d) The exchange rates that would be published by IEEMA would be for the following foreign currencies only.

1) U.S. Dollars
2) Pound Sterling
3) Japanese Yen
4) Euro

MATERIAL PRICE VARIATION CLAUSE FOR AAC/AAAC/ACSR CONDUCTORS

The price quoted/confirmed for Aluminium Conductor is based on the input cost of raw materials as on the date of quotation. It is deemed to be related to the prices of raw materials, as specified in the price variation clauses given below. In case of any variation in these prices, the prices payable shall be subject to adjustment up or down in accordance with the following formulae.

For Excise duty units

1. AAC/AAAC Conductors

$$P = Po + WA (AL - ALo)$$

2. ACSR Conductors

$$P = Po + WA (AL - ALo) + WF (FE - FEo)$$

For Excise duty exempted units

1. AAC/AAAC Conductors

$$P = Po + WA (AL_e - ALo_e)$$

2. ACSR Conductors

$$P = Po + WA (AL_e - ALo_e) + WF (FE_e - FEo_e)$$

Wherein,

P = Ex-works price payable in Rs. per km as adjusted in accordance with the price variation clause

Po = Ex-works price quoted/confirmed in Rs. per km.

WA = Weight of Aluminium in AAC/AAAC/ACSR Conductor in MT per Km. as per the type of conductor (Refer the enclosed annexure – A giving this factor for various types of conductors)

ALo = Price of EC Grade Aluminium Ingot/Rod (as per contract) exclusive of excise duty in Rs./MT for AAC/ACSR Conductor
Or Price of Aluminium alloy Rod in exclusive of excise duty Rs./MT for AAAC Conductor
This price is applicable prevailing as on 30 days prior to the date of tender opening.

ALo_e= Price of EC Grade Aluminium Ingot/Rod (as per contract) inclusive of excise duty in Rs./MT for AAC/ACSR Conductor
Or Price of Aluminium alloy Rod inclusive of excise duty in Rs./MT for AAAC Conductor
This price is applicable prevailing as on 30 days prior to the date of tender opening.

WF = Weight of Steel Content in ACSR Conductor in MT per Km. as per the type of conductor
Refer the enclosed annexure – A giving this factor for various types of conductors

FEo = Price (exclusive of excise duty) of High Tensile Galvanized Steel Wire in Rs./MT of appropriate size
This price is applicable prevailing as on 30 days prior to the date of tender opening.

FEo_e= Price (inclusive of excise duty) of High Tensile Galvanized Steel Wire in Rs./MT of appropriate size
This price is applicable prevailing as on 30 days prior to the date of tender opening.

For example, if tender is opened on 31st May 2008, the applicable raw material prices (ALo and FEo) would be those, prevailing as on the 1st day of May 2008.

AL = Price of EC Grade Aluminium Ingot/Rod (as per contract) exclusive of excise duty in Rs./MT for AAC/ACSR Conductor
Or Price of Aluminium alloy Rod in exclusive of excise duty Rs./MT for AAAC Conductor
This price is applicable prevailing as on 30 days prior to the date of delivery.

AL_e = Price of EC Grade Aluminium Ingot/Rod (as per contract) inclusive of excise duty in Rs./MT for AAC/ACSR Conductor
Or Price of Aluminium alloy Rod inclusive of excise duty in Rs./MT for AAAC Conductor
This price is applicable prevailing as on 30 days prior to the date of delivery.

FE = Price (exclusive of excise duty) of High Tensile Galvanized Steel Wire in Rs./MT of appropriate size
This price is applicable prevailing as on 30 days prior to the date of delivery.

FE_e = Price (inclusive of excise duty) of High Tensile Galvanized Steel Wire in Rs./MT of appropriate size
This price is applicable prevailing as on 30 days prior to the date of delivery.

For example, if the date of delivery is 31st December 2008, the applicable raw material prices (AL and FE) would be those prevailing as on the 1st day of December 2008.

The above prices and indices are as published by IEEMA vide circular reference IEEMA(PVC)/Al.Conductor/--

The date of delivery is the date on which the Conductor is notified as being ready for inspection/dispatch (in the absence of such notification, the date of manufacturer's dispatch note is to be considered as the date of delivery) or the contracted delivery date (including any agreed extension thereto), whichever is earlier.

Notes:

1. All prices of raw materials applicable to excise duty units are exclusive of modvatable excise/CV duty amount and exclusive of any other central, state or local taxes, octroi etc.
2. All prices of raw materials applicable to excise duty exemption units are inclusive of excise duty (but exclusive of any other central, state or local taxes, octroi etc.) since they are unable to utilize the modvat credit on their input raw materials. However, such units need to provide necessary documentary evidences such as copies of invoices to prove the above situation.
3. The price of EC grade Aluminium Ingot/rod and Aluminium Alloy rod (in Rs./MT) is the average of price as announced by primary producers. Monthly price circular will contain various revisions in prices of Aluminium during the month as announced by the primary producers.
4. The price of High tensile Galvanized Steel Wire (in Rs./MT) for different sizes in mm is the price as quoted by a primary producer; which is normally valid for the entire month. Further revisions in prices; if any; as quoted by the primary producer will also be published.

Weight Factors for various types of Conductors as per IS: 398

Sr. No.	Conductor types	A / AA Strands	Steel Strands	Aluminium EC Grade/ Alloy kg / km	HT GS Steel kg / km	Total kg / km
1	AAC - GNAT	7/2.21	-	74.00	0.00	74.00
2	AAC - ANT	7/3.10	-	145.00	0.00	145.00
3	AAC - WASP	7/4.39	-	290.00	0.00	290.00
4	AAC- PEONY	19/3.18	-	415.00	0.00	415.00
5	AAC - SPIDER	19/3.99	-	654.00	0.00	654.00
6	AAC - BUTTER FLY	19/4.65	-	888.00	0.00	888.00
7	ACSR - MOLE	6/1.50	1/1.50	29.00	14.00	43.00
8	ACSR - ROSE	6/1.96	1/1.96	50.00	23.00	73.00
9	ACSR - SQUIRREL	6/2.11	1/2.11	58.00	27.00	85.00
10	ACSR - WEASEL	6/2.59	1/2.59	87.00	41.00	128.00
11	ACSR - RABBIT	6/3.35	1/3.35	145.00	69.00	214.00
12	ACSR - RACCOON	6/4.09	1/4.09	216.00	103.00	319.00
13	ACSR - DOG	6/4.72	7/1.57	288.00	106.00	394.00
14	ACSR - WOLF	30/2.59	7/2.59	437.00	289.00	726.00
15	ACSR - PANTHER	30/3.00	7/3.00	586.00	388.00	974.00
16	ACSR - KUNDAH	42/3.50	7/1.96	1,116.00	165.00	1,281.00
17	ACSR - ZEBRA	54/3.18	7/3.18	1,185.00	436.00	1,621.00
18	ACSR - MORKULLA	42/4.13	7/2.30	1,553.00	228.00	1,781.00
19	ACSR - MOOSE	54/3.53	7/3.53	1,465.00	539.00	2,004.00
20	ACSR - BERSIMIS	42/4.57	7/2.54	1,909.00	278.00	2,181.00
21	ACSR – SNOWBIRD	42/3.99	7/2.21	1,447.00	210.00	1,657.00
22	ACSR – LAPWING	45/4.78	7/3.18	2,231.00	436.00	2,667.00
23	ACSR – CYNX	30/2.79	7/2.79	507.00	335.00	842.00
24	ACSR – DRAKE	26/4.44	7/3.45	1,116.00	512.00	1,628.00
25	ACSR – COYOTE	26/2.54	7/1.91	365.00	156.00	521.00

21	AAAC - MOLE	3/2.50	-	40.15	0.00	40.15
22	AAAC SQUIRREL	7/2.00	-	60.16	0.00	60.16
23	AAAC - WEASEL	7/2.50	-	94.00	0.00	94.00
24	AAAC - RABBIT	7/3.15	-	149.20	0.00	149.20
25	AAAC - RACCOON	7/3.81	-	218.26	0.00	218.26
26	AAAC - DOG	7/4.26	-	272.86	0.00	272.86
27	AAAC - DOG - UP	19/2.89	-	342.51	0.00	342.51
28	AAAC - COYOTE	19/3.15	-	406.91	0.00	406.91
29	AAAC - WOLF	19/3.40	-	474.02	0.00	474.02
30	AAAC - WOLF - UP	19/3.66	-	549.40	0.00	549.40
31	AAAC - PANTHER	19/3.94	-	636.67	0.00	636.67
32	AAAC - PANTHER - UP1	37/3.15	-	794.05	0.00	794.05
33	AAAC - PANTHER - UP2	37/3.45	-	952.56	0.00	952.56
34	AAAC - KUNDAH	37/3.71	-	1,101.63	0.00	1,101.63
35	AAAC - ZEBRA	37/4.00	-	1,280.50	0.00	1,280.50
36	AAAC - ZEBRA - UP	61/3.31	-	1,449.38	0.00	1,449.38
37	AAAC - MOOSE	61/3.45	-	1,573.71	0.00	1,573.71
38	AAAC - MORKULLA	61/3.55	-	1,666.00	0.00	1,666.00
39	AAAC - MOOSE UP	61/3.66	-	1,771.36	0.00	1,771.36
40	AAAC - MORKULLA - UP	61/3.81	-	1,919.13	0.00	1,919.13
41	AAAC - BERSIMIS	61/4.00	-	2,115.54	0.00	2,115.54

PRICE VARIATION CLAUSE FOR INSTRUMENT TRANSFORMERS BELOW 72.5 KV
(Current and Potential Transformers designed for operation on system voltage below 72.5 KV)

The price quoted/confirmed is based on the input cost of raw materials/components and labour cost as on the date of quotation and the same is deemed to be related to prices of raw materials and all India average consumer price index number for industrial workers as specified in the price variation clause given below. In case of any variation in these prices and index numbers, the price payable shall be subject to adjustment, up or down in accordance with the following formula:

$$P = \frac{P_0}{100}\left(18 + 18\,\frac{C}{C_0} + 20\,\frac{ES}{ES_0} + 10\,\frac{IS}{IS_0} + 12\,\frac{ER}{ER_0} + 09\,\frac{TB}{TB_0} + 13\,\frac{W}{W_0}\right)$$

Wherein,

P = Price payable as adjusted in accordance with the above formula.

P_0 = Price quoted/confirmed.

C_0 = Average LME settlement price of copper wire bars (refer notes)

This price is as applicable for the month, two months prior to the date of tendering.

ES_0 = C&F price of CRGO Electrical Steel Sheets (refer notes)

This price is as applicable on the 1st working day of the month, one month prior to the date of tendering.

IS_0 = Wholesale price index number for 'Iron & Steel (Base: 1993-94=100)' (refer notes)

This index number is as applicable for the week ending 1st Saturday of the month, three months prior to the date of tendering.

ER_0 = Price of Epoxy Resin (refer notes)

This price is as applicable on the 1st working day of the month, one month prior to the date of tending.

TB_0 = Price of Transformer Oil Base Stock (refer notes)

This price is as applicable on the 1st working day of the month, two months prior to the date of tendering.

W_0 = All India average consumer price index number for industrial workers, as published by the Labour Bureau, Ministry of Labour, Govt. of India (Base 1982 = 100)

This index number is as applicable on the first working day of the month, three months prior to the date of tendering.

For example, if date of tendering falls in October 2005, the applicable prices of Copper Wire Bars (C_0) and Transformer Oil Base Stock (TB_0) should be for the month August 2005, where as the applicable price of CRGO Electrical Steel Sheets (ES_0) and Epoxy Resin (ER_0) should be as on 1st September 2005 and Wholesale price index number for 'Iron & Steel' (IS_0) should be for the week ending first Saturday of July 2005 and all India average consumer price index number (W_0) should be for the month of July 2005.

The above prices and indices are as published by IEEMA vide circular reference number IEEMA(PVC)/CTPT/_/_ prevailing as on first working day of the month ..... i.e., one month prior to the date of tendering.

C = Average LME settlement price of copper wire bars (refer notes)

This price is as applicable for the month, two months prior to the date of delivery.

ES = C&F price of CRGO Electrical Steel Sheets (refer note)

This price is as applicable on the 1st working day for the month, one month prior to the date of delivery.

IS = Wholesale price index number for 'Iron & Steel (Base: 1993-94=100)' (refer notes)

This index number is as applicable for the week ending 1st Saturday of the month, three months prior to the date of delivery.

ER = Price of Epoxy Resin (refer notes)

This price is as applicable on the 1st working day of the month, one month prior to the date of delivery.

TB = Price of Transformer Oil Base Stock (refer notes)

This price is as applicable on the 1st working day of the month, two months prior to the date of delivery.

W = All India average consumer price index number for industrial workers, as published by the Labour Bureau, Ministry of Labour, Govt. of India (Base 1982 = 100)

This index number is as applicable on the first working day of the month, three months prior to the date of delivery.

For example, if date of delivery in terms of clause given below falls in December 2005, the applicable prices of Copper Wire Bars (C) and Transformer Oil Base Stock (TB) should be for the month October 2005; where as applicable prices of CRGO Electrical Steel Sheets (ES) and Epoxy Resin (ER) should be as on 1st November 2005 and Wholesale price index number for 'Iron & Steel' (IS) should be for the week ending first Saturday of September 2005 and all India average consumer price index number (W) should be for the month of September 2005.

The date of delivery is the date on which the instrument transformer is notified as being ready for inspection/despatch (in the absence of such notification, the date of manufacturer's despatch note is to be considered as the date of delivery) or the contracted delivery date (including any agreed extension thereto), whichever is earlier.

Notes: (a) All prices of raw materials are exclusive of modvatable excise/CV duty amount and exclusive of any other central, state or local taxes; octroi etc. Instrument transformers manufacturers import major raw materials like Copper, CRGO Electrical Steel Sheets and TOBS etc. The landed cost of these imported raw materials includes applicable custom duty but exclusive of modvatable CVD.

(b) All prices are as on first working day of the month.

(c) The details of prices are as under:

1) The LME price of Copper Wire Bars (in Rs./MT) is the LME average settlement price of Copper Wire Bars for one month prior to the month of the circular converted into Indian Rupees with applicable exchange rates prevailing as on 1st working day of the subsequent month. This price is the landed cost, inclusive of applicable customs duty only but exclusive of countervailing duty.

2) The price of CRGO Electrical Steel Sheets (in Rs./MT) is the average CIF price in US $ per MT converted into Indian Rupees with applicable exchange rate prevailing as on 1st working day of the month, as quoted by primary producers. This price is the landed cost, inclusive of applicable customs duty only but exclusive of countervailing duty.

3) The wholesale price index number for 'Iron & Steel' is as published by the Office of Economic Advisor, Ministry of Industry, Govt. of India, New Delhi with base 1993-94=100. This wholesale price index number is being published weekly on provisional basis. However, the same gets finalized after eight weeks and is normally available after two months. Therefore, we are considering in our calculations this final index for the first Saturday of the months two months prior to the date of which the prices of other raw materials such as Al, IM are published for the corresponding month.

(c) The details of prices are as under:

1) The LME price of Copper Wire Bars (in Rs./MT) is the LME average settlement price of Copper Wire Bars for one month prior to the month of the circular converted into Indian Rupees with applicable exchange rates prevailing as on 1st working day of the subsequent month. This price is the landed cost, inclusive of applicable customs duty only but exclusive of countervailing duty.

2) The price of CRGO Electrical Steel Sheets (in Rs./MT) is the average CIF price in US $ per MT converted into Indian Rupees with applicable exchange rate prevailing as on 1st working day of the month, as quoted by primary producers. This price is the landed cost, inclusive of applicable customs duty only but exclusive of countervailing duty.

3) The wholesale price index number for 'Iron & Steel' is as published by the Office of Economic Advisor, Ministry of Industry, Govt. of India, New Delhi with base 1993-94=100. This wholesale price index number is being published weekly on provisional basis. However, the same gets finalized after eight weeks and is normally available after two months. Therefore, we are considering in our calculations this final index for the first Saturday of the months two months prior to the date of which the prices of other raw materials such as Al, IM are published for the corresponding month.

(c) The details of prices are as under:

1) The LME price of Copper Wire Bars (in Rs./MT) is the LME average settlement price of Copper Wire Bars for one month prior to the month of the circular converted into Indian Rupees with applicable exchange rates prevailing as on 1st working day of the subsequent month. This price is the landed cost, inclusive of applicable customs duty only but exclusive of countervailing duty.

2) The price of CRGO Electrical Steel Sheets (in Rs./MT) is the average CIF price in US $ per MT converted into Indian Rupees with applicable exchange rate prevailing as on 1st working day of the month, as quoted by primary producers. This price is the landed cost, inclusive of applicable customs duty only but exclusive of countervailing duty.

3) The wholesale price index number for 'Iron & Steel' is as published by the Office of Economic Advisor, Ministry of Industry, Govt. of India, New Delhi with base 1993-94=100. This wholesale price index number is being published weekly on provisional basis. However, the same gets finalized after eight weeks and is normally available after two months. Therefore, we are considering in our calculations this final index for the first Saturday of the months two months prior to the date of which the prices of other raw materials such as Al, IM are published for the corresponding month.

4) The price of Epoxy resin is price quoted by resin manufacturer for their grade CT 5900 or its nearest equivalent.

5) The price of TOBS is C&F price (in Rs./K.Ltr) for Group II grade 70 Base Oil as published in ICIS-LOR bulletin for the 1st week of the previous month. This price is normally published in US$ per US Gallon, which is converted in Rs./K.Ltr with applicable exchange rate prevailing on 1st working day of the subsequent month. This price is the landed cost, inclusive of applicable customs duty only but exclusive of countervailing duty.

PRICE VARIATION CLAUSE FOR INSTRUMENT TRANSFORMERS 72.5 KV AND ABOVE
(Current and Potential Transformers designed for operation on system voltage 72.5 KV and above)

The price quoted/confirmed is based on the input cost of raw materials/components and labour cost as on the date of quotation and the same is deemed to be related to prices of raw materials and all India average consumer price index number for industrial workers as specified in the price variation clause given below. In case of any variation in these prices and index numbers, the price payable shall be subject to adjustment, up or down in accordance with the following formula:

$$P = \frac{P_0}{100}\left(18 + 13\,\frac{C}{C_0} + 12\,\frac{ES}{ES_0} + 12\,\frac{IS}{IS_0} + 23\,\frac{IM}{IM_0} + 6\,\frac{TB}{TB_0} + 16\,\frac{W}{W_0}\right)$$

Wherein,

P = Price payable as adjusted in accordance with the above formula.

P_0 = Price quoted/confirmed.

C_0 = Average LME settlement price of copper wire bars (refer notes)

This price is as applicable for the month, two months prior to the date of tendering.

ES_o = C&F price of CRGO Electrical Steel Sheets (refer notes)

This price is as applicable on the 1st working day of the month, one month prior to the date of tendering.

IS_o = Wholesale price index number for 'Iron & Steel (Base: 1993-94=100)' (refer notes)

This index number is as applicable for the week ending 1st Saturday of the month, three months prior to the date of tendering.

IM_0 = IEEMA Index for Insulator (Base: January 2003=100) (refer notes)

This index is as applicable on the 1st working day of the month, one month prior to the date of tending.

TB_0 = Price of Transformer Oil Base Stock (refer notes)

This price is as applicable on the 1st working day of the month, two months prior to the date of tendering.

W_0 = All India average consumer price index number for industrial workers, as published by the Labour Bureau, Ministry of Labour, Govt. of India (Base 1982 = 100)

This index number is as applicable on the first working day of the month, three months prior to the date of tendering.

For example, if date of tendering falls in October 2005, the applicable prices of Copper Wire Bars (C_0) and Transformer Oil Base Stock (TB_0) should be for the month August 2005, where as the applicable price of CRGO Steel Sheets (ES_0) and IEEMA Index for Insulator (IM_0) should be as on 1st September 2005 and Wholesale price index number for 'Iron & Steel' (IS_0) should be for the week ending first Saturday of July 2005 and all India average consumer price index number (W_0) should be for the month of July 2005.

The above prices and indices are as published by IEEMA vide circular reference number IEEMA(PVC)/CTPT/_/_ prevailing as on first working day of the month ..... i.e., one month prior to the date of tendering.

C = Average LME settlement price of copper wire bars (refer notes)

This price is as applicable for the month, two months prior to the date of delivery.

ES = C&F price of CRGO Electrical Steel Sheets (refer note)

This price is as applicable on the 1st working day for the month, one month prior to the date of delivery.

IS = Wholesale price index number for 'Iron & Steel (Base: 1993-94=100)' (refer notes)

This index number is as applicable for the week ending 1st Saturday of the month, three months prior to the date of delivery.

IM = IEEMA Index for Insulator (Base: January 2003=100) (refer notes)

This index is as applicable on the 1st working day of the month, one month prior to the date of delivery.

TB = Price of Transformer Oil Base Stock (refer notes)

This price is as applicable on the 1st working day of the month, two months prior to the date of delivery.

W = All India average consumer price index number for industrial workers, as published by the Labour Bureau, Ministry of Labour, Govt. of India (Base 1982 = 100)

This index number is as applicable on the first working day of the month, three months prior to the date of delivery.

For example, if date of delivery in terms of clause given below falls in December 2005, the applicable prices of Copper Wire Bars (C) and Transformer Oil Base Stock (TB) should be for the month October 2005; where as applicable prices of CRGO Electrical Steel Sheets (ES) and IEEMA Index for Insulator (IM) should be as on 1st November 2005 and Wholesale price index number for 'Iron & Steel' (IS) should be for the week ending first Saturday of September 2005 and all India average consumer price index number (W) should be for the month of September 2005.

The date of delivery is the date on which the instrument transformer is notified as being ready for inspection/despatch (in the absence of such notification, the date of manufacturer's despatch note is to be considered as the date of delivery) or the contracted delivery date (including any agreed extension thereto), whichever is earlier.

Notes: (a) All prices of raw materials are exclusive of modvatable excise/CV duty amount and exclusive of any other central, state or local taxes; octroi etc. Instrument transformers manufacturers import major raw materials like Copper, CRGO Electrical Steel Sheets and TOBS etc. The landed cost of these imported raw materials includes applicable custom duty but exclusive of modvatable CVD.

(d) All prices are as on first working day of the month.

(e) The details of prices are as under:

1) The LME price of Copper Wire Bars (in Rs./MT) is the LME average settlement price of Copper Wire Bars for one month prior to the month of the circular converted into Indian Rupees with applicable exchange rates prevailing as on 1st working day of the subsequent month. This price is the landed cost, inclusive of applicable customs duty only but exclusive of countervailing duty.

2) The price of CRGO Electrical Steel Sheets (in Rs./MT) is the average C&F price in US $ per MT converted into Indian Rupees with applicable exchange rate prevailing as on 1st working day of the month, as quoted by primary producers. This price is the landed cost, inclusive of applicable customs duty only but exclusive of countervailing duty.

3) The wholesale price index number for 'Iron & Steel' is as published by the Office of Economic Advisor, Ministry of Industry, Govt. of India, New Delhi with base 1993-94=100. This wholesale price index number is being published weekly on provisional basis. However, the same gets finalized after eight weeks and is normally available after two months. Therefore, we are considering in our calculations this final index for the first Saturday of the months two months prior to the date of which the prices of other raw materials such as Al, IM are published for the corresponding month.

4) IEEMA Index for Insulator (Base January 2003=100) is published in basic price circular for Insulator vide reference IEEMA (PVC)/INSLR/--/-- applicable for IEEMA price variation clause for Insulator viz. IEEMA (PVC)/INSLR effective from 01st April 2003.

5) The price of TOBS is C&F price (in Rs./K.Ltr) for Group II grade 70 Base Oil as published in ICIS-LOR bulletin for the 1st week of the previous month. This price is normally published in US$ per US Gallon, which is converted in Rs./K.Ltr with applicable exchange rate prevailing on 1st working day of the subsequent month. This price is the landed cost, inclusive of applicable customs duty only but exclusive of countervailing duty.

PRICE VARIATION CLAUSE FOR INSULATORS

The price quoted/confirmed is based on the cost of raw material and labour cost as on the date of quotation and the same is deemed to be related to the price of zinc, index number for Insulators and all India average consumer price index number for industrial workers as specified in the price variation clause given below. In case of any variation in these index numbers, the price payable shall be subject to adjustment up or down in accordance with the following formula:

$$P = \frac{P_0}{100}\left(15 + 5\ \frac{Zn}{Zn_0} + 53\ \frac{IN\text{-}INSLR}{IN_0\text{-}INSLR} + 27\ \frac{W}{W_0}\right)$$

Wherein,

P = Price payable as adjusted in accordance with the above formula.

P_0 = Price quoted/confirmed.

Zn_0 = Price of electrolytic high grade zinc (refer notes).

This price is as applicable on the first working day of the month, one month prior to the date of tendering.

IN_0-INSLR = Index number for Insulators based on relative prices and weightages (as given in brackets) of Wholesale price index number for Fuel, Power, Light and Lubricants (28), Wholesale price index number for Basic Metals, Alloys and Metal Products (15), Wholesale price index number for Wood and Wood Products (6) and Ball Clay (4) calculated considering their values as on 1st January 2003 as base equal to 100 (refer notes).

This index number is as applicable on the first working day of the month, one month prior to the date of tendering.

W_0 = All India average consumer price index number for industrial workers, as published by the Labour Bureau, Ministry of Labour, Govt. of India (Base 1982 = 100).

This index number is as applicable for the month three months prior to the date of tendering.

For example, if the date of tendering falls in May 2003, price of Zinc and the applicable index number for Insulators (IN_0-INSLR) should be that prevailing as on 1st April 2003 and the applicable all India average consumer price index number (W_0) should be for the month of February 2003.

The above indices are as published by IEEMA vide IEEMA circular reference number IEEMA(PVC)/INSLR/_/_ prevailing as on first working day of the month..... i.e., one month prior to the date of tendering.

Zn = Price of electrolytic high grade zinc (refer notes).

This price is as applicable on the first working day of the month, two months prior to the date of delivery.

IN - INSLR = Index number for Insulators based on relative prices and weightages (as given in brackets) of Wholesale price index number for Fuel, Power, Light and Lubricants (28), Wholesale price index number for Basic Metals, Alloys and Metal Products (15), Wholesale price index number for Wood and Wood Products (6) and Ball Clay (4) calculated considering their values as on 1st January 2003 as base equal to 100 (refer notes).

This index number is as applicable on the first working day of the month, two months prior to the date of delivery.

W = All India average consumer price index number for industrial workers (base 1982 = 100) as published by Labour Bureau, Ministry of Labour, Govt. of India.

This index number is as applicable for the month, four months prior to the date of delivery.

For example, if the date of delivery in terms of clause given below falls in December 2003, price of Zinc and the applicable index number for Insulators (IN-INSLR) should be that as published by IEEMA as prevailing on 1st October 2003 and the applicable all India average consumer price index number (W) should be for the month of August 2003.

The "date of delivery" is the date on which the Insulator is notified as being ready for inspection/despatch (in the absence of such notification, the date of manufacturer's despatch note is to be considered as the date of delivery) or the contracted delivery date (including any agreed extension thereto), whichever is earlier.

Notes :(a) All prices of raw materials considered for arriving at the index number for Insulators are exclusive of modvatable excise duty and exclusive of any other central, state or local taxes, octroi etc.

(b) All prices are as on 1st working day of the calender month.

(c) The details of the prices considcered are as under:

1) The price of electrolytic high grade zinc (in Rs/MT) is ex-works price as quoted by the primary producer of zinc.

2) The price of ball clay (in Rs/Kg) is the average price of 'N-1' type ball clay as quoted by the two manufacturers.

3) The wholesale price index numbers for 'Fuel, Power, Light and Lubricants', 'Basic Metals, Alloys and Metal Products' and 'Wood and Wood Products' are as published by the office of Economic Advisor, Ministry of Industry, Govt. of India, New Delhi, with base 1993-94 = 100. These wholesale price indices are being published weekly on provisional basis. However, the same get finalised after eight weeks and are normaly available after two months. Therefore, we are considering in our calculations these final indices published by Economic Advisor for the first Saturday of the months two months prior to the date of which the price of Ball Clay and Zinc is considered.

For example, for calculating index number for Insulators on first working day of the month of October, the basic prices of zinc and ball clay are to be considered as on first working day of October and the wholesale price indices for 'Fuel, Power, Light and Lubricants', 'Basic Metals, Alloys and Metal Products' and 'Wood and Wood Products' are to beconsidered as published by Economic Advisor for the first week ending Saturday of the month of August.

PRICE VARIATION CLAUSE FOR BUSDUCTS

The price quoted/confirmed is based on the cost of raw materials/components and labour cost as on the date of quotation and the same is deemed to be related to prices of raw materials, index number for busducts and all India average consumer price index number for industrial workers as specified in the price variation clause given below. In case of any variation in these Index numbers, the price payable shall be subject to adjustment up or down in accordance with the following formula:

$$P = \frac{P_0}{100}\left(15 + 65\,\frac{IN - BUSDUCT}{IN_0 - BUSDUCT} + 20\,\frac{W}{W_0}\right)$$

Wherein,

P = Price payable as adjusted in accordance with the above formula.

P_0 = Price quoted/confirmed.

IN_0–BUSDUCT= Index number for busduct is based on relative prices and weightages (as given in the brackets) busbar grade aluminium (50), wholesale price index number for iron and steel (5), epoxy resin (5) and copperwire bars (5) calculated considering their prices as on 1st June 2000 (as base =100) (refer notes).

This index number is as applicable on the first working day of the month, three months prior to the date of tendering.

W_0 = All India average consumer price index number for industrial workers, as published by the Labour Bureau, Ministry of Labour, Govt. of India (Base 1982 = 100).

This index number is as applicable for the month, three months prior to the date of tendering.

For example, if the date of tendering falls in May 2001, the applicable index number for busducts (IN_0–BUSDUCT) and all India average consumer price index number (W_0) both should be for the month of February 2001, Which would appear in the circular issued for the month of April 2001.

The above prices and indices are as published by IEEMA vide circular reference number IEEMA(PVC)BUSDUCT/_/_ prevailing as on first working day of the month..... i.e., one month prior to the date of tendering.

IN-BUSDUCT = Index number for busduct is based on relative prices and weightages (as given in the brackets) busbar grade aluminium (50), wholesale price index number for iron and steel (5), epoxy resin (5) and copperwire bars (5) calculated considering their prices as on 1st June 2000 (as base =100) (refer notes).

This index number is as applicable on the first working day of the month, three months prior to the date of delivery.

W = All India average consumer price index number for industrial workers, general index as published by the Labour Bureau, Govt. of India (Base 1982 = 100).

This index number is as applicable for the month, three months prior to the date of delivery.

For example, if the date of delivery in terms of clause given below falls in December 2001 the applicable index number for busducts (IN-BUSDUCT) and the applicable all India average consumer price index number (W) should be for the month of September 2001, which would appear in the circular issued for the month of November 2001.

The "date of delivery" is the date on which the busduct is notified as being ready for inspection/despatch. (In the absence of such notification the date of manufacturer's despatch note is to be considered as the date of delivery) or the contracted delivery date (including any agreed extension thereto), whichever is earlier.

Notes: (a) All prices of raw materials considered for arriving at the index number for busduct are exclusive of modvatable excise/CV duty amount and exclusive of any other central, state or local taxes, octroi etc.

(b) All prices are as on first working day of the month.

(c) The details of prices considered for index number for busduct are as under:

1. The price of busbar grade aluminium (in Rs/MT) is the average of ex-works price as quoted by the two primary producers for the busbar size 152.4 x 6.35 mm flat approximately, of grade equivalent to E91E as per IS 5082-1981 (or the latest).
2. The wholesale price index number for iron and steel is as published by the office of the economic adviser, Ministry of industry, Govt. of India, New Delhi, with base (1993-94 = 100). This wholesale price index is being published weekly on provisional basis. However, the same gets finalised after 8 weeks and is normally available after two months. Therefore we are considering in our calculations this final index only as published by the economic adviser.
3. The price of Epoxy Resin (Rs/KG) is ex-works price as quoted by a resin manufacturer for their epoxy resin CT5900 or its nearest equivalent.
4. Price for electrolytic copper wire bars (in Rs/MT) is the ex-godown / ex-works price as quoted by the primary producer.

Price variation clause for 'Civil Works and Erection' associated with the Electrical Contract for Transmission and Distribution Projects

The prices quoted/confirmed is based on the input cost of raw materials/components and labour cost as on the date of quotation and the same is deemed to be related to wholesale price index numbers for related commodities and all India average consumer price index number for industrial workers as specified in the price variation clauses given below. In case of any variation in these index numbers, the price payable shall be subject to adjustment, up or down in accordance with the following formulae:

1. **Price variation formula for 'Concreting'**

$$P = \frac{P_0}{100}\left(20 + 20\,\frac{HSD}{HSD_0} + 30\,\frac{C}{C_0} + 20\,\frac{SC}{SC_0} + 10\,\frac{W}{W_0}\right)$$

2. **Price variation formula for 'Reinforced and other steel works'**

$$P = \frac{P_0}{100}\left(20 + 65\,\frac{IS}{IS_0} + 10\,\frac{HSD}{HSD_0} + 05\,\frac{W}{W_0}\right)$$

3. **Price variation formula for 'Erection (Excluding Reinforced and other steel works and concreting)'**

$$P = \frac{P_0}{100}\left(20 + 22\,\frac{HSD}{HSD_0} + 58\,\frac{W}{W_0}\right)$$

Wherein,

P = Price payable as adjusted in accordance with the above formula.

P_0 = Price quoted/confirmed

HSD_o = Wholesale price index number for 'High Speed Diesel Oil' (Base: 1993-94=100) (refer notes)
This index number is as applicable for the week ending 1st Saturday of the month, one month prior to the date of tendering.

C_o = Wholesale price index number for 'Cement' (Base: 1993-94=100) (refer notes)
This index number is as applicable for the week ending 1st Saturday of the month, one month prior to the date of tendering.

SC_o = Wholesale price index number for 'Structural Clay products' (Base: 1993-94=100)(refer notes)
This index number is as applicable for the week ending 1st Saturday of the month, one month prior to the date of tendering.

IS_o = Wholesale price index number for 'Iron & Steel (Base: 1993-94=100)' (refer notes)
This index number is as applicable for the week ending 1st Saturday of the month, one month prior to the date of tendering.

W_0 = All India average consumer price index number for industrial workers, as published by the Labour Bureau, Ministry of Labour, Govt. of India (Base 1982 = 100)

This index number is as applicable on the first working day of the month, one month prior to the date of tendering.

For example, if date of tendering falls in May 2005, the applicable Wholesale price indices (HSD_0, C_0, SC_0 and IS_0) should be for the week ending first Saturday of April 2005 and all India average consumer price index number (W_0) should be for the month of April 2005.

The above prices and indices are as published by IEEMA vide circular reference IEEMA (PVC)/CW-ER /_/_ prevailing as on first working day of the month of tendering.

HSD = Wholesale price index number for 'High Speed Diesel Oil' (Base: 1993-94=100) (refer notes)

This index number is as applicable for the week ending 1st Saturday of the month, one month prior to the date of joint inspection and completion certificate.

C = Wholesale price index number for 'Cement' (Base: 1993-94=100) (refer notes)

This index number is as applicable for the week ending 1st Saturday of the month, one month prior to the date of joint inspection and completion certificate.

SC = Wholesale price index number for 'Structural Clay products' (Base: 1993-94=100)(refer notes)

This index number is as applicable for the week ending 1st Saturday of the month, one month prior to the date of joint inspection and completion certificate.

IS = Wholesale price index number for 'Iron & Steel (Base: 1993-94=100)' (refer notes)

This index number is as applicable for the week ending 1st Saturday of the month, one month prior to the date of joint inspection and completion certificate.

W = All India average consumer price index number for industrial workers, as published by the Labour Bureau, Ministry of Labour, Govt. of India (Base 1982 = 100)

This index number is as applicable on the first working day of the month, one month prior to the date of joint inspection and completion certificate.

For example, if date of joint inspection and completion certificate falls in December 2005, the applicable Wholesale price indices (HSD, C, SC and IS) should be for the week ending first Saturday of November 2005 and all India average consumer price index number (W) should be for the month of November 2005.

Date of completion of work is the date notified by the contractor for carrying out joint inspection of the work completed or contracted completion date; whichever is earlier.

Notes: The wholesale price index numbers for 'High speed diesel oil', 'Cement', 'Structural clay products' and 'Iron & Steel' are as published by the Office of Economic Advisor, Ministry of Industry, Govt. of India, New Delhi with base 1993-94=100. This wholesale price index numbers are being published weekly on provisional basis. The same gets finalized after eight weeks and is available after two months.

Material Price Variation Clause For PVC And XLPE Insulated Cables

The Price quoted/confirmed is based on the input cost of raw materials/components as on the date of quotation, and the same is deemed to be related to the prices of raw materials as specified in the price variation clause given below. In case of any variation in these prices, the price payable shall be subject to adjustment up or down in accordance with the formulae provided in this document.

Terms used in price variation formulae:

P Price payable as adjusted in accordance with above appropriate formula (in Rs/Km)

Po Price quoted/confirmed (in Rs/Km)

ALUMINIUM

AlF Variation factor for aluminium

Al Price of EC grade aluminiujm rods (Properzi rods). This price is as applicable of first working day of the month, one month prior to the date of delivery.

Alo Price of EC grade aluminium rods (properzi rods). This price is as applicable on first working day of the month, one month prior to the date of tendering.

COPPER

CuF Variation factor for copper

Cu Price of CC copper rods. This price is as applicable on first working day of the month, one month prior to the date of delivery.

Cuo Price of CC copper rods. This price is as applicable on first working day of the month, one month prior to the date of tendering.

PVC COMPOUND/POLYMER

Cc price of PVC compound. This price is as applicable on first working day of the month, one month prior to the date of delivery.

Cco Price of PVC compound. This price is as applicable on first working day of the month, one month prior to the date of tendering.

CCFAl Variation factor for PVC compound/Polymer for aluminum conductor cable.

CCFCu Variation factor for PVC compound/Polymer for copper conductor cable.

STEEL

FeF	Variation factor for steel
FeW	Variation factor for round wire steel armouring
Fe	Price of Steel Strips/steel wire. This price is as applicable on the first working day of the month, one month prior to the date of delivery.
Feo	Price of steel strips/steel wire. This price is as applicable on first working day of the month, one month prior to the date of tendering.

The above prices and indices are as published by IEEMA vide Circular reference IEEMA(PVC)/CABLE/--/-- prevailing as on 1st working day of the month i.e. one month prior to the date of tendering.

The date of delivery is the date on which the cable is notified as being ready for inspection/dispatch (in the absence of such notification, the date of manufacturer's dispatch note is to be considered as the date of delivery) or the contracted delivery date (including any agreed extension thereto), whichever is earlier.

Notes

(a) All prices of raw materials are exclusive of modvatable excise/CV duty amount and exclusive of any other central, state or local taxes, octroi, etc.

(b) All Prices are as on first working day of the month.

(c) The details of prices are as under:

1 The price of aluminum (in Rs/MT) is the average ex-works price of EC grade aluminium rods quoted by the primary producers confirming to specification IS: 5484

2. Price of PVC Compound (in Rs/MT) is the ex-works price, as quoted by the manufacturer.

3. Price of CC copper rods (in Rs/MT) is ex-works price as quoted by the primary producer.

4. Price of galvanized steel strip / steel wire (in Rs/MT) is ex-works price as quoted by the manufacturer for Round steel Wire and Flat steel strip (the relevant price of steel strip or steel wire is to be selected depending upon the type of armouring of the cable).

Price variation formulae for 'Power Cables'

A. Aluminum conductor PVC insulated 1.1 kV power cables

P = Po + AlF (AL – Alo) + CCFAl (CC – Cco) + FeF (Fe - Feo)

For unarmourd multicore cables (without steel armour); FeF = 0

Table References:

ALP	Aluminium conductor in single core unarmoured & multicore cables
P1	Aluminium conductor aluminium armour in single core armoured cables
P2	PVC compound
P3	Steel armour

B. Copper conductor PVC insulated 1.1 kV power cables

P = Po + CuF (Cu – Cuo) + CCFCu (CC – Cco) + Fef (Fe – Feo) + AlF (Al – Alo)

For steel armoured cables; AlF = 0 For aluminium armoured cables; FeF = 0
For unarmoured cables; FeF, AlF = 0

Tables References:

CUP	Copper conductor
P2	PVC compound
P3	Steel armour
P4	Aluminium armour

C. Copper conductor PVC insulated 1.1 kV control cables

P = Po + CuF (Cu – Cuo) + CCFCu (CC-Cco) + FeF (Fe-Feo)

For unarmoured cables; FeF = 0

Tables References:

CUC	Copper conductor
P5	PVC compound
P6	Steel armour

D. Aluminium Conductor XLPE insulated 1.1 kV power cables

P = Po + AlF (AL – Alo) + CCFAl (CC – Cco) + FeF (Fe – Feo)

For unarmoured multicore cables (without steel armour); FeF = 0

Table References:

ALPAluminium conductor in single core unarmoured & multicore cables

L1	Aluminium conductor + aluminium armour in single core armoured cables
L2	Polymer
L3	Steel armour

E. **Copper conductor XLPE insulated 1.1 kV power cables**

$P = Po + CuF\ (Cu - Cuo) + CCFCu\ (CC - Cco) + FeF\ (Fe - Feo) + AlF\ (Al - Alo)$

For steel armoured cables; AlF = 0 For aluminium armoured cables; FeF = 0
For unarmoured cables; FeF, AlF = 0

Table References:

CUP	Copper conductor
L2	Polymer
L3	Steel armour
L4	Aluminium armour

F. **Copper Conductor XLPE insulated 1.1 kV control cables**

$P = Po + CuF\ (Cu - Cuo) + CCFCu\ (CC - CCO) + FeF\ (Fe - Feo)$
For unarmoured cables; FeF = 0

Table References:

CUC	Copper conductor
L5	Polymer
L6	Steel armour

G. **For Aluminium conductor XLPE insulated 3.3 to 33 kV power cables**

$P = Po + AlF\ (Al - Alo) + CCFAl\ (Cc - Cco) + FeF\ (Fe - Feo)$

For unarmoured multicore cables (without steel armour); FeF = 0

Table Refernces:

ALP	Aluminium conductor in single core unarmoured & multicore cables
H1	Aluminium conductor + aluminium armour in single core armoured cables
H2	Polymer
H3/H5	Steel armour (Flat/Round)

H. **Copper conductor XLPE Insulated 3.3 to 33 kV power cables**

$P = Po + CuF\ (Cu - Cuo) + CCFCu\ (CC - Cco) + FeF\ (Fe - Feo) + AlF\ (Al - Alo)$

For steel armoured cables; AlF = 0 For aluminium armoured cables; FeF = 0
For unarmoured cables; FeF, AlF = 0

Table References:

CUP	Copper conductor
H2	Polymer
H3/H5	Steel armour (Flat/Round)
H4	Aluminium armour

Material Price Variation Clause for XLPE Insulated EHV Cables (66 kV to 500 KV)

The Price quoted/confirmed is based on the input cost of raw materials/components as on the date of quotation, and the same is deemed to be related to the prices of raw materials as specified in the price variation clause given below. In case of any variation in these prices, the price payable shall be subject to adjustment up or down in accordance with the formulae provided in this document.
Terms used in price variation formulae:

P Price payable as adjusted in accordance with above appropriate formula **(in Rs/Km)**
Po Price quoted/confirmed **(in Rs/Km)**

1) Conductor Metal

MIF Variation factor for Conductor
MIF2 Price of Respective Conductor Material as below (from a to b); this price is as applicable on Two months prior to the date of delivery.
MIF1 Price of Respective Conductor Material as below (from a to b); this price is as applicable on One month prior to the date of tendering.

a) ALUMINIUM (Conductor)

AlF Variation factor for Aluminium
Al Price of Aluminium; this price is as applicable on Two months prior to the date of delivery.
Alo Price of Aluminium; this price is as applicable on One month prior to the date of tendering.

b) COPPER (Conductor)

CuF Variation factor for copper
Cu Price of CC Copper rods. This price is as applicable on Two months prior to the date of delivery.
Cuo Price of CC copper rods. This price is as applicable on One month prior to the date of tendering.

2) XLPE Compound

XL3 Variation factor for XLPE Compound
XLFAl Variation factor for XLPE Compound for Aluminium Conductor Cable
XLFCu Variation factor for XLPE Compound for Copper Conductor Cable
CC Price of XLPE Compound. This price is as applicable on Two months prior to the date of delivery.
Cco Price of XLPE Compound. This price is as applicable on One month prior to the date of tendering.

3) Polymer Compound

XL5 Variation factor for Polymer Compound
CCFAl Variation factor for PE Compound for Aluminium Conductor Cable
CCFCu Variation factor for PE Compound for Copper Conductor Cable

POC Price of Polymer Compound. This price is as applicable on Two months prior to the date of delivery.

POCo Price of Polymer Compound. This price is as applicable on One month prior to the date of tendering.

4) Metallic Screen / Sheath

SMIF Variation factor for Sheath/Screen material

SMIF2 Price of Respective Sheath/Screen Material as below (from a to d); this price is as applicable on Two months prior to the date of delivery.

SMIF1 Price of Respective Sheath/Screen Material as below (from a to d); this price is as applicable on One month prior to the date of tendering.

a) COPPER (Screen) : In Copper Wire Screen + PolyAl Construction

CuFc Variation factor for copper screen

Cu Price of CC copper rods. This price is as applicable on Two months prior to the date of delivery.

Cuo Price of CC copper rods. This price is as applicable on One month prior to the date of tendering.

b) COPPER (Screen) : In Lead Sheath Construction

CuFpb Variation factor for copper screen

Cu Price of CC copper rods. This price is as applicable on Two months prior to the date of delivery.

Cuo Price of CC copper rods. This price is as applicable on One month prior to the date of tendering.

c) LEAD : In Lead Sheath Construction

PbF Variation factor for Lead

Pb Price of Pig lead (99.97%). This price is as applicable on Two months prior to the date of delivery.

Pbo Price of Pig lead (99.97%). This price is as applicable on One month days prior to the date of tendering.

d) Corrugated Aluminium Sheath

AlFs Variation factor for corrugated Aluminium sheath

Al Price of Aluminiujm. This price is as applicable on Two months prior to the date of delivery.

Alo Price of Aluminium). This price is as applicable on One month prior to the date of tendering.

The above prices and indices are as published by IEEMA vide Circular reference IEEMA(PVC)/CABLE(R-1)/--/-- prevailing as on 1st working day of the month i.e. one month prior to the date of tendering.

The date of delivery is the date on which the cable is notified as being ready for inspection/dispatch (in the absence of such notification, the date of manufacturer's dispatch note is to be considered as the date of delivery) or the contracted delivery date (including any agreed extension thereto), whichever is earlier.

Notes

(a) All prices of raw materials are exclusive of GST amount.
(b) All prices excluding Aluminium & Copper are as on first working day of the month.
(c) The details of prices are as under:

1. Price of Aluminium is LME average Cash SELLER Settlement price of Primary Aluminium in US$ per MT as published by London Metal Bulletin (LME) including Premium for Aluminium Ingot in US$ per MT is converted in Indian Rs./MT.
2. Price of CC copper rods (in Rs/MT) is ex-works price as quoted by the primary producer.
3. Price of Pig lead (in Rs/MT) is ex-works price as quoted by the primary producer.
4. Price of Polymer Compound (in Rs/MT) is the ex-work price, as quoted by the manufacturer/s
5. Price of XLPE Compound (in Rs/MT) is the ex-works price, as quoted by the manufacturer/s

PV Formulae

a) For Aluminium /copper Conductor XLPE insulated copper wire screen + polyal PE/PVC sheathed cables

P = Po + MIF (MIF2 – MIF1) + XL3 (CC-Cco) + SMIF (SMIF2-SMIF1) + XL5 (POC - POCo)

Table references:-
Table 1 (MIF) : Aluminium Conductor AlF / Copper Conductor CuF
Table 2 (XL3) : Aluminium Conductor XLFAl / Copper Conductor XLFCu
Table 3a (SMIF) : Copper Wire Screen in Copper Wire Screen + Polyal Construction (CUFc)
Table 4 (XL5) : Aluminium Conductor CCFAl / Copper Conductor CCFCu

Note:
For cases where Short Circuit Current through Screen/Sheath is required & is not available in the Reference Tables, in that case Screen/Sheath area as approved by the customer in Datasheet / Short Circuit Current calculation of Screen/Sheath shall be used to derive SMIF as below:

If A= Area of Metallic Screen/Sheath in Approved Datasheet / Calculation Sheet
D= Density= 8.89 for Cu
SMIF=(A*D)/1000

b) For Aluminium /Copper Conductor XLPE insulated copper wire screen +Lead metallic sheathed PE/PVC sheathed cables

P = Po + MIF (MIF2 – MIF1) + XL3 (CC-Cco) + $SMIF_{Pbf}$ (SMIF2-SMIF1) + $SMIF_{CuFpb}$ (SMIF2-SMIF1) + XL5 (POC - POCco)

Table references:-
Table 1 (MIF) : Aluminium Conductor AlF / Copper Conductor CuF
Table 2 (XL3) : Aluminium Conductor XLFAl / Copper Conductor XLFCu
Table 3c (SMIF) : Lead in Lead Sheath Construction PbF
Table 3d (SMIF) : Copper wire screen in Lead Sheath Construction CuFpb
Table 4 (XL5) : Aluminium Conductor CCFAl / Copper Conductor CCFCu

Note:
For cases where Short Circuit Current through Screen/Sheath is required & is not available in the Reference Tables, in that case Screen/Sheath area as approved by the customer in Datasheet / Short Circuit Current calculation of Screen/Sheath shall be used to derive SMIF as below:

If A= Area of Metallic Screen/Sheath in Approved Datasheet / Calculation Sheet
D= Density= 8.89 for Cu & & 11.3 for Pb
SMIF=(A*D)/1000

c) For Aluminium /Copper Conductor XLPE insulated Corrugated Aluminium metallic sheathed PE/PVC sheathed cables

P = Po + MIF (MIF2 – MIF1) + XL3 (CC-Cco) + SMIF (SMIF2-SMIF1) + XL5 (POC - POCco)

Table references:-
Table 1 (MIF) : Aluminium Conductor AlF / Copper Conductor CuF
Table 2 (XL3) : Aluminium Conductor XLFAl / Copper Conductor XLFCu
Table 3b (SMIF) : Corrugated Aluminium in CAS Construction AlFs
Table 4 (XL5) : Aluminium Conductor CCFAl / Copper Conductor CCFCu

Note:
For cases where Short Circuit Current through Screen/Sheath is required & is not available in the Reference Tables, in that case Screen/Sheath area as approved by the customer in Datasheet / Short Circuit Current calculation of Screen/Sheath shall be used to derive SMIF as below:

If A= Area of Metallic Screen/Sheath in Approved Datasheet / Calculation Sheet
D= Density= 2.703 for Al
SMIF=(A*D)/1000

4) The formulas enlisted for PV Calculations, in the serial no (3) shall be used for the same category of other materials/equipments, if specific formula not available .

5) The statutory charges shall be borne by the contractor at first for the sake of speedy work execution, later same shall be re-reimbursed on the production of the paid receipt.

6) You shall be responsible for the solving ROW issues .

7) You shall ensure that there shall not be any major power supply interruptions during the

intended work.

8) All the required statutory clearances and safety clearances shall be maintained as per CEA

guidelines.

9) All materials must be procured from the KPTCL approved Vendors only , same shall be got approved from KPTCL/BDA.

10) Work shall be executed as per the standard norms and specifications of the KPTCL.

11)Time to time Pert charts should be submitted by agency.

12)Agency should engage Parallel work force for speedy completion.

13)Store and watch &ward shall be contractor responsibility.

14)Work should be carried out as per milestones mentioned in contract data.